National Morbidity Reporting

By C. C. DAUER, M. D.

A revision in the list of reportable diseases and modifications in reporting procedures were formally approved October 31, 1951, by the Association of State and Territorial Health Officers. This represents a major forward step in the improvement of the national scheme of morbidity reporting.

The new system went into effect on January 1, 1952. Its approval by the State health officers is the product of extensive discussions and studies, plus a national conference of epidemiologists, health statisticians, and public health administrators. A manual of instructions covering the approved procedures was distributed to all State and Territorial health officers December 1, 1951, by the Public Health Service.

The main change in the revised system is the addition of eight diseases to the list that States have been reporting each week to the Public Health Service. Two diseases are deleted.

Botulism, brucellosis, dengue, infectious hepatitis, malaria, rabies in man, trichinosis, and typhus fever have been added to the weekly list. Influenza and pneumonia will no longer be reported weekly or annually to the Public Health Service. The consensus is that a better estimate of the prevalence of these diseases can be obtained through reports of respiratory outbreaks and of appropriate laboratory examinations, in combination with mortality records.

Statistics for the 25 diseases now on the weekly list (table 1) will appear in summary form for the United States in the Communicable Disease Summary and for each State in the Morbidity and Mortality Weekly Report, both

published weekly by the National Office of Vital Statistics.

Monthly summaries of communicable diseases from the States have been discontinued. Instead, States will submit annual summaries, by month and by county of residence, of 39 diseases (table 2). The annual summaries are a return, in part, to reporting practice prior to 1948. Diseases for which acceptable laboratory tests are available to confirm the diagnoses will be tabulated by the final total number reported and the number confirmed by laboratory examination. Annual summaries by months will be published in special reports; the summaries by county of residence will not be published generally but will be made available to persons who request and need such information.

New Emphasis on Epidemic Reporting

A parallel and complementary development in morbidity reporting is the increased emphasis on epidemic reporting. Reports of disease outbreaks are now collected and published on a current basis. The system is working well but full participation by local health officers is sought. All State and Territorial health officers have been requested to report promptly any outbreak or unusual occurrence of diseases of public health interest or importance. Weekly publication of this information will continue.

Responsibility for collecting reports of foodand water-borne outbreaks of disease—previously an activity of the Division of Sanitation—has been assigned to the National Office of Vital Statistics. These reports are made currently rather than at the end of each year, and information from them is included in weekly publications of the Public Health Service's National Office of Vital Statistics. An annual summary of food- and water-borne outbreaks will be continued as heretofore.

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-Procedures for National Morbidity Reporting-

Approved by the Association of State and Territorial Health Officers

I. International Quarantine Agreement

An international quarantine agreement to which the United States is a signatory requires the immediate notification by telegram of the following diseases to the Surgeon General of the U. S. Public Health Service:

Cholera.

Plague.

Smallpox.

Typhus fever, epidemic (louse-borne).

Yellow fever

II. Epidemic Reports

All outbreaks or unusual occurrences of communicable and other diseases of public health interest should be reported promptly to the U. S. Public Health Service. All such reports should be sent by or through the State health officer.

III. Weekly Summary of Notifiable Diseases

The total number of cases not previously reported for a minimum list of diseases (table 1), should be reported weekly to the Public Health Service by each State. Such reports are considered as provisional data, subject to further screening by all interested agencies.

IV. Annual Summary of Notifiable Diseases

- A. Annual summary by calendar year should be made to the U. S. Public Health Service for an expanded list of diseases (table 2).
- B. The annual summary should consist of the following tabulations:
- 1. State totals of cases not previously reported of the diseases in table 2 by month, with specification of method of allocation to month according to one of the following:

Table 1. Weekly summary of notifiable diseases

Anthrax
Botulism
Brucellosis
Cholera
Dengue
Diphtheria
Infectious encephalitis
Infectious hepatitis, including serum hepatitis
Malaria
Measles
Meningococcal meningitis
and meningococcemia
Pertussis (whooping

Plague
Poliomyelitis
Rabies in man
Rabies in animals
Rocky Mountain spotted
fever
Smallpox

Streptococcal sore throat, including scarlet fever Trichinosis Tularemia Typhoid fever Typhus fever, endemic Typhus fever, epidemic Yellow fever

(a) Date of onset.

cough)

- (b) Date of report.
- (c) Date of receipt of report by local health office.
- (d) Date of receipt of report by State health office.
- (e) Other (specify).
- 2. State totals of laboratory confirmed cases. The States should individually establish standards for acceptable laboratory confirmations for inclusion in these reports to the U. S. Public Health Service, recognizing the desirability of eventually achieving uniformity of these standards among the States. (This is an attempt to secure information on the number of cases of certain diseases, such as diphtheria, typhoid fever, etc., which were confirmed by a laboratory test. The suitability of a test for confirmation of diagnosis is left to the State health officer.)
- 3. Annual totals of notifiable diseases by county of usual residence for each disease in table 2.

The inclusion of certain notifiable diseases in the weekly summaries and the expanded reporting of disease outbreaks were recommended partly because the data may provide vital information in defense against biological warfare. Many of the diseases listed for weekly reporting are caused by organisms regarded as potential agents that might be employed in subversive activities.

Wide Use for Data

Originally, communicable diseases were reported primarily to determine, as soon as pos-

sible, the prevalence in the community of diseases dangerous to the public health—especially the pestilential diseases. Reporting served as the first step in applying control measures such as quarantine. Later, the collection and assembling of such data provided basic material needed by local and State agencies for planning more effective programs for the prevention or control of some infectious diseases. They have also indicated the futility of severe restrictive measures in attempting to control others.

Health officers of local areas and States, as well as Federal and international agencies, need

Table 2. Annual summary of notifiable diseases 1

Amebiasis	Rabies in animals
Anthrax	Rocky Mountain spotted
Botulism	fever
Brucellosis	Salmonellosis
Cholera	Shigellosis
Dengue	Smallpox
Diphtheria	Streptococcal sore throat,
Glanders	including scarlet fever
Infectious encephalitis	Tetanus
(by etiology if known)	Trachoma
Infectious hepatitis, in-	Trichinosis
cluding serum hepatitis	Tuberculosis (all forms)
Leprosy	Tularemia
Leptospirosis	Typhoid fever
Malaria	Typhus fever, endemic
Measles	Typhus fever, epidemic
Meningococcal meningitis	Yellow fever
and meningococcemia	Venereal diseases
Pertussis (whooping	Chancroid
cough)	Gonorrhea
Plague	Granuloma inguinale
Poliomyelitis	Lymphogranuloma ven-
Paralytic	ereum
Nonparalytic	Syphilis
Unspecified	Primary and second-
Psittacosis	ary
2 0.01.00	All other
Q fever	mi otner
Rabies in man	

¹ All diseases for which laboratory confirmations are available are to be reported by (1) total cases, and (2) total laboratory confirmed cases.

V. Venereal Diseases and Tuberculosis

The annual summary of notifiable diseases should contain tabulations of the number of tuberculosis and venereal disease cases. This does not affect the collection and distribution of certain data by the Divisions of Chronic Disease and Tuberculosis and of Venereal

current information on incidence of disease to study present or new problems, locally, nationally, or internationally. They must also have data to set up appropriate and effective preventive or control measures as the need arises. A communicable disease reporting system that operates smoothly and effectively during a national emergency or castastrophe is a necessity. It would be especially important if the threat of biological warfare or atomic bombing became a reality.

Medical researchers and physicians have urgent need for data on the incidence of infectious diseases. A physician who has a special inter-

Disease of the U. S. Public Health Service from States for purposes of program development or operational activities.

VI. Morbidity Reports From Cities

The subcommittee notes that arrangements exist whereby weekly morbidity reports are furnished to the National Office of Vital Statistics by a selected list of cities throughout the United States. It is the consensus of the committee that this procedure should continue, but it recommends further study of the purposes and procedures for such reports.

VII. National Morbidity Reporting Procedures

The reporting procedures needed to implement the collection of the data described in the recommendations of the committee will be defined in a manual of morbidity reporting procedures prepared by the National Office of Vital Statistics. The draft of this manual has been prepared by the National Office of Vital Statistics with consultation from this subcommittee. Communicable Disease Center, Divisions of Chronic Disease and Tuberculosis and of Venereal Disease of the U.S. Public Health Service, and the Working Group on Morbidity Statistics of the Public Health Conference on Records and Statistics. This manual should be distributed to all States and other appropriate agencies if and when the national morbidity reporting plan is approved by the Association of State and Territorial Health Officers.

VIII. Reporting Animal Diseases

Information as to the occurrence of certain animal diseases which may be transmitted to man is urgently needed for prevention of those diseases in man. Such information should be furnished by veterinarians and others through suitable channels for availability to local, State, and national health agencies. The threat of biological warfare adds to the urgency of developing this program, although the need for it has been apparent for many years.

est in a disease such as tularemia or diphtheria, or the research worker who is studying strepto-coccal infections, often needs and asks for nation-wide data in order that he may have a sounder basis upon which to develop better methods of treatment or prevention. The need is also apparent in requests for information that may be used in preparing papers to be read at scientific meetings or for publication in journals or books.

Increasing demands for similar data on chronic diseases may lead, in the near future, to more adequate collection methods in this field. Some attempts have already been made to use hospital statistics as an index of the prevalence of chronic diseases.

Morbidity data are much in demand for general information and health education. Information is needed by persons engaged in health activities in official and nonofficial health agencies. Material supplied to the press, the radio, feature writers of magazines which have a general distribution, and to various publications, such as yearbooks, assist in health education. Private citizens, students, and others request national morbidity data for a variety of uses.

Commercial organizations, such as insurance companies, manufacturers of pharmaceutic and biological products, and other business groups have a legitimate need for morbidity data in planning and developing services and products.

Evolution of Morbidity Reporting

Occasionally, rapidly changing characteristics of a disease have called for relatively rapid changes in reporting, collecting, and disseminating the data. The severe epidemic of poliomyelitis in 1916, the pandemic of influenza in 1918, the explosive emergence of encephalitis in St. Louis in 1933, and the recent increase of malaria among military personnel returning from Korea, all resulted in relatively quick changes in reporting procedures to provide essential data for evaluating new situations.

But most of the changes in the Nation's 74year-old communicable disease reporting system have evolved slowly. The Public Health Service was first authorized, by an act of Congress in 1878, to collect morbidity data for use in quarantine measures against such pestilential diseases as cholera, smallpox, plague, and vellow fever. One year later, a specific appropriation was made for the collection and publication of reports of notifiable diseases, principally from foreign ports. In 1893, an act provided for collection of information each week from State and municipal authorities throughout the United States. To obtain uniformity in the registration of morbidity statistics, Congress enacted a law in 1902 which directed the Surgeon General of the Public Health Service to provide forms for the collection, compilation, and publication of the weekly data.

Reports on notifiable diseases were received

from a very few States and cities prior to 1900, but gradually more and more States submitted monthly and annual summaries. It was not until after 1925 that all States reported regularly.

In 1913, the State and Territorial health authorities recommended weekly telegraphic reports by States for a few diseases, but several years elapsed before a large number submitted figures in such a manner.

Public Health Service personnel were first assigned in 1914 as collaborating epidemiologists to State health departments to assist in preparing the reports. Later, State health officers were designated as collaborating epidemiologists, and local officials were appointed as assistant collaborating epidemiologists. Beginning in 1915, the collaborating epidemiologists in a few States used report cards with penalty privileges. In 1919, the policy of supplying cards to all States was established by request of the State and Territorial health authorities. However, not all States have used morbidity report cards which carry the penalty privilege.

Reciprocal notification of diseases in persons presumably infected outside the State was practiced by Minnesota as early as 1914. However, other States did not participate until after 1917, when the State and Territorial health authorities recommended the adoption of this practice.

Until 1942, the collection, compilation, and publication of morbidity statistics was under the direction of the Division of Sanitary Reports and Statistics of the Public Health Service. These functions were transferred to the Division of Public Health Methods in 1942, and to the National Office of Vital Statistics in 1949.

Product of Many Groups

The current plan is the product of much discussion and weighing of needs.

In 1948, a limited revision of morbidity reporting procedures was instituted following a study by a group in the Public Health Service. Soon after the transfer of morbidity reporting activities to the National Office of Vital Statistics, another committee in the Public Health Service was appointed to review the procedures then in operation and to present a revised plan which would more nearly meet the needs of

both State and Federal health agencies and aid in providing essential information for civil defense. The threat of biological warfare has been an added incentive to the development of a revised program of morbidity reporting.

A plan was submitted to the Association of State and Territorial Health Officers at their meeting in Washington, October 23–27, 1950. The action taken was in the form of a recommendation that all States cooperate with the Public Health Service in a 1-year trial of the "Plan for Revising Morbidity Reporting by States," effective January 1, 1951. Because certain technical problems arose regarding operation of the plan, the effective date was post-poned.

On January 13, 1951, the Association of State and Territorial Health Officers authorized a conference of State epidemiologists to determine what diseases should be reported by States to the Public Health Service and procedures to be followed in submitting weekly and annual summaries. A conference was held in Atlanta, Ga., April 18–20, 1951,¹ and subsequently an interim group, the subcommittee of the Committee of Infectious Diseases of the Association,² drew up the final report on the recommendations of the conference. The statement was also reported to the Committee on Administra-

tive Practice of the American Public Health Association at its meeting in San Francisco on October 29. The State and Territorial Health Officers, meeting in the same city, unanimously approved the report October 31, 1951.

First Step in Larger Plan

The new morbidity reporting procedures are the first step in an over-all program for improvement of morbidity reporting. Some means of improving the completeness and promptness of reporting by physicians, methods for checking the completeness of reporting, development of acceptable standards for laboratory confirmation of certain diseases, greater uniformity in items of information reported for individual cases of notifiable diseases, and uniform methods for allocation of cases by residence and by months, are a few of the problems that need study and resolution. Some of these are already being considered by the Working Group on Morbidity Statistics of the Public Health Conference on Records and Statistics. Other studies bearing on these problems are being contemplated in cooperation with representatives of State health departments and of branches of the Public Health Service. Eventually, the studies should result in more accurate and dependable morbidity data.

A discussion of morbidity reporting as the basis of communicable disease control, presented by Dr. Wilson G. Smillie at the Conference of State Epidemiologists on National Morbidity Reporting, will be published in an early issue of Public Health Reports.

¹ For program see the CDC Bulletin, 10: 18-22 May 1951.

² Members of the subcommittee were: Chairman A. C. Hollister, California; R. F. Korns, New York; A. S. McCown, Virginia; C. R. Freeble, Ohio; and A. L. Gray, Mississippi.